

Remarks

Claims 1-3, 5-13, 22, 26-33, and 35-37 are pending in the application, with claims 1, 22, and 31 being the independent claims. Based on the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Rejections under 35 U.S.C. § 102

The Office Action states on page 2 that claim 31 is rejected under 35 U.S.C. § 102(e) as being unpatentable over U.S. Pat. No. 5,862,066 to Rossin *et al.* (hereinafter, "Rossin"). Specifically, the Office Action states that Rossin, col. 2, lines 12-67, discloses a computer system as claimed in claim 31. Applicants respectfully traverse this assertion.

As pointed out in the Office Action, Rossin discloses a computer graphics system that includes a geometry accelerator, the functions of which "result in rendering data which is sent to the frame buffer subsystem for rasterization." (Rossin, col. 2, lines 59-61.) However, "the rendering data is provided by geometry accelerator 110 along bus 112 to host interface 106 which re-formats the rendering data, performs a floating point to fixed point conversion, and provides such data along bus system 122 to frame buffer subsystem 104." (Rossin, col. 4, lines 35-39.) This conversion from floating point to fixed point format prior to rasterization in Rossin clearly teaches away from "a raster subsystem for performing a rasterization process, *the rasterization process performed in a floating point format; and a floating point frame buffer coupled to the raster subsystem for storing a plurality of floating point color values,*" as recited in present claim 31 (emphasis added). Therefore Rossin does not teach all the features recited in claim 31. Accordingly, the requirements for prima facie anticipation

have not been met, and Applicants request that the rejection under 35 U.S.C. § 102(e) of claim 31, and its respective dependent claims, be removed and that these claims be passed to allowance.

Rejections under 35 U.S.C. § 103

The Office Action states on page 3 that claims 1-3, 5-13, 22, 26-30, 32-33, and 35-57 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Rossin in view of U.S. Pat. No. 6,115,047 to Deering *et al.* (hereinafter, "Deering"). Specifically, the Office Action states that Rossin discloses a computer system as claimed, with the exception of "a processor for performing geometric calculations on a plurality of vertices of a primitive." For reasons similar to those described above in reference to claim 31, Applicants respectfully traverse.

As shown above, Rossin's conversion from floating point to fixed point format prior to rasterization clearly teaches away from the claimed invention, and neither Deering nor any other applied document cures the deficiencies of Rossin. For example, neither Rossin nor any other applied document teaches or suggests "a rasterization circuit coupled to the processor that rasterizes the primitive according to *a rasterization process which operates using a floating point format*" or "a frame buffer coupled to the rasterization circuit *for storing a plurality of image values in the floating point format*," as recited in independent claim 1 (emphasis added). Similarly, neither Rossin nor any other applied document teaches or suggests "*rasterizing the data in a floating point format*" or "*storing the data in the frame buffer in the floating point format*," as recited in independent claim 22 (emphasis added). Therefore, neither Rossin nor any other applied document, alone or in combination, teaches or suggests all the features recited in independent claims 1 or 22.

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Accordingly, the requirements for prima facie obviousness have not been met, and Applicants request that the rejection under 35 U.S.C. § 103(a) of independent claims 1 and 22, and their respective dependent claims, be removed and that these claims be passed to allowance.

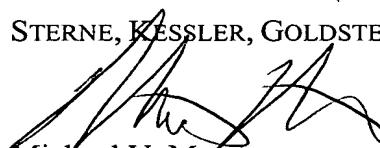
Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all currently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Reply is respectfully requested.

Respectfully submitted,

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Date: April 29, 2004

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